

**ABSTRACT OF THE DISCLOSURE**

An architecture that supports the instrumentation of software to generate structured information about its operation. A library of methods and data structure definitions is provided to a developer of a piece of software. The developer includes calls to the methods in order to signal the fact that a given event has occurred. The developer may also cause the program to provide information descriptive of the event by populating data structures defined in the library. The library methods may also contribute to the population of these data structures. In a distributed computing environment in which tasks are performed through a series of calls to remote computers, "per-task" tracing may be performed by sending trace instructions to the remote computers along with the remote calls.